November 5, 2009 (Attach G.2)

IT Initiative Charter Summaries

The TGB directed the JCIO at the October TGB meeting to develop charter summaries for all IT initiatives listed on the four quadrant document (twenty-seven initiatives in all). After developing the first charter summary, the document was shared with the TGB chair for verification of the material and if the correct information was being collected for the board's continued discussion. The JCIO also believed it unlikely all twenty-seven charter summaries could be completed by the November TGB meeting. The TGB chair agreed to the charter format and to limiting the charter development to the eleven IT initiatives that follow.

Discussion Points from the JCIO to the TGB:

- The concept of each IT initiative has been verified by the JCIO, but the content of each charter is still under discussion and will continue to be discussed and edited at future JCIO meetings.
- 2. It remains challenging to move all IT initiatives forward, due to a limited number of state resources. The JCIO would like direction from the TGB in setting priorities and determining the number of IT initiatives that should be worked on at a given time.
- 3. Governance continues to be a subject discussed by the JCIO regarding the IT initiatives. While the governance issue has not been decided, various alternatives have been suggested. Governance may need to be at the quadrant level, the IT initiative level or some other level required by the TGB.

Direction from the TGB on the above points will aid future JCIO discussions on the subject.

Initiative Name: A-1 I.T. Security

1. What are the goals of the IT Security Initiatives?

Balance risk, costs and business requirements associated with cyber security in order to protect the confidentiality, integrity and availability of the State of Iowa Information technology systems and data.

- Confidentiality prevent the disclosure of information to unauthorized individuals or systems.
- Integrity prevent data from being modified without authorization
- Availability Ensure information technology systems and data are available when needed.

2. How does this initiative impact the state's business goals?

Protection of citizen data
Reduction of cyber security related risks
Compliance with laws and regulations

3. What are the deliverables of the Initiative?

IT security is an ongoing process of risk reduction through governance and operational practices. Security processes must be balanced with the organizations ability to meet their business goals. Both the ISO office and agencies have required I.T. security responsibilities. Effective I.T. Security programs address the following components.

Governance Activities

- Standards, Policy, Legislation
 - Develop, facilitate and update enterprise security standards
 - Develop internal security policies and procedures
 - Facilitate and respond to changes in cyber security related legislation
- Compliance, Assessments, Audits, Remediation, Reporting
 - o Comply with federal and external entities PCI, HPPA, OIG, IRS, etc.
 - Perform annual ISO 27001 agency security assessments
 - Audit compliance with enterprise security standards
 - o Remediate problems
 - Report to senior management and state leaders on security posture
- Security Education & Awareness

- Deliver general and specific security awareness training for state employees as required by security standards.
- Strategic Partnerships
 - Establish collaborative partnerships with State and Federal agencies,
 law enforcement, universities, private business and industry groups
- Business Continuity Planning and Disaster Recovery
 - Document, plan and test I.T. disaster recovery exercises
- Incident management
 - Establish and follow response processes, procedures and practices
- Strategic security related acquisitions and initiatives
 - Sponsor security initiatives to reduce cyber security related risks

Operational Activities

- Implement Physical and Environmental Security controls
 - Restricted access, badge and sign in systems
 - Adequate power, cooling and suppression controls
- Implement Access controls
 - Least privilege permissions to Application, File, Network, Web services
 - Separation of duties and auditing controls
 - Encryption of mobile devices and confidential systems
- Implement and test prevention and detection systems
 - Patch Management
 - o Anti-virus, Anti-spyware, Anti-Malware, Anti-Phishing, Anti-Trojan
 - Gateway and SPAM Filtering
 - o Intrusion detection systems, log monitoring, collection, analysis
 - Conduct regular vulnerability testing
- Implement Application Security
 - Address security risks throughout application development lifecycle
 - Vulnerability scanning
- Manage I.T. assets effectively
 - Asset inventory system in place
 - Appropriately licensed software
 - Proper equipment disposal techniques
- Support administrative investigations
 - Forensics Analysis

4. How many state resources are currently involved on the initiative? (identify total numbers of FTE's and the percentage of time on behalf of the initiative)

Governance:

Enterprise Information Security Office (2 FTE's) Transportation (1 FTE) Others?

Varies by agency size, funding, compliance requirements, infrastructure

CIO Security Subcommittee Meets monthly for 2 hours (varies between 10-15 FTE's)

Workgroups include:

Computer Security and Awareness
Emerging Threats and Solutions
Policy, Standards, and Best Practices
Security Collaboration: Information Sharing, Cross Training

Operational:

Department of Administrative Services (2 FTE's) Transportation (1 FTE) Others????

Varies by agency size, funding, compliance requirements, infrastructure

Combined duties:

The majority of agencies employ a single FTE with shared responsibilities for I.T. security governance, operations and often other duties.

Initiative Name: A-2 Business Continuity - Ongoing LDRPS and Planned Enhancements

1. What are the goals of the initiative?

Issues:

- Current funds projected to be depleted by November 2010. The funds are being used to pay for the LDRPS administrator and port charges to ITE. Twenty-four concurrent licenses are paid through December 2011.
- Need to find sustainable funding –marketplace service, utility or something else--to keep this system in place for COOP/COG and API (Application Portfolio Inventory).

Ongoing work: To maintain the state's COOP/COG (Continuity of Operations / Continuity of Government) plans and API in the LDRPS (Living Disaster Recovery Planning System) packaged software product.

Planned project:

Develop a sustainable administration and funding model for LDRPS which includes a formal governance committee overseeing changes and enhancements to the LDRPS in test and production environments along with necessary funding to sustain LDRPS for its users.

To increase the functionality of LDRPS by implementing the following modules:

- A. Business Impact Analysis (BIA) Professional
- B. Workforce Assessment
- C. Vendor Assessment
- D. Application Programming Interface (API) module (different than Application Portfolio Inventory)

To improve efficiency in acquiring essential information for enterprise COOP/COG plans.

To provide real time data exchange between LDRPS and other systems of record.

2. How does this initiative impact the state's business goals?

Ongoing work and planned project: Use of LDRPS will assist agencies in maintaining compliance with the requirements set forth in State of Iowa Executive Order 40, which specifies: "...all Iowa State executive branch agencies, in collaboration with the Homeland Security and Emergency Management Division of the Iowa Department of Public Defense, shall prepare a Continuity of Operations and a Continuity of Government plan to ensure the State's ability to deliver essential services under any circumstance." Additionally, Homeland Security Presidential Directives 3, 5, 7 and 20 as well as Federal Preparedness Circular 65 and National Response Plan, 9230, require the establishment and implementation of COOP and COG planning.

3. What are the deliverables of the initiative?

Ongoing work:

- 34 agency COOP/COG plans maintained in LDRPS
- Installation of original LDRPS version 9.1 and later version 10.0
- Repository of API (Application Portfolio Inventory) agency data for critical agency applications.

Planned project:

- Establishment of LDRPS Steering Committee reporting to the TGB. Currently the LDRPS Steering Committee reports to a sponsor group comprised of DHS, HSEMD, and DAS.
- Revise existing charter of governance processes for LDRPS decision making
- Installation of test and production environments for LDRPS.
- Training of state staff regarding the new LDRPS modules, including training materials.
- Enhanced COOP/COG agency plans using the new modules.
- 4. How many state resources are currently involved on the initiative? (identify total numbers of FTE's and the percentage of time on behalf of the initiative)

Ongoing work:

Full-time LDRPS administrator	40 hours per week
34 agencies with one staff member at an average of 3 hours weekly	102 hours per week

Planned project:

1 Administrator's FTE estimated @ 16 hours per each LDRPS module	64 hours			
34 FTEs (Agency representatives) @ 24 hours for all LDRPS enhancements816 hours				
Training: 3 training sessions @ 2 hours a session per modules A, B and C: • Produce training materials • Trainer hours • LDRPS user training for 34 COOP planners	24 hours			
Total: 34 state agencies, estimated total resources of 35 FTEs	.1148 hours			

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Initiative Name: A-3 IT Procurement

1. What are the goals of the initiative?

To establish common specifications for commodity IT Hardware allowing consolidated purchase contracts where known purchase quantities create an expectation of discount greater than the cost of putting together the purchase contract.

To establish a list of frequently purchased IT Software which if purchased under an enterprise master agreement would create an expectation of discount greater than the cost of putting together the master agreement.

To examine and make recommendations on the ITQ process for procuring IT Services.

2. How does this initiative impact the state's business goals?

The procurement of IT Hardware, Software and Services can be time consuming, thus increasing costs for a project, or may be done frequently at small scales, thus also increasing costs for a project. Appropriate coordination of the purchase of IT Hardware, Software and Services can save agency resources.

3. What are the deliverables of the initiative?

Hardware:

- 1. List of historic IT Hardware purchases by category with amount spent by the state versus the expected "retail" cost.
- 2. Estimate of the amount of time saved by agencies if the hardware was available through a master contract.
- 3. Estimate of the potential dollar savings if the hardware was available through a master contract.
- 4. Evaluation as to which master contracts for IT Hardware purchases should be pursued and which are not currently cost effective.

Software:

- 1. List of historic IT Software licensing and maintenance purchases by publisher with amount spent by the state versus the expected "retail" cost.
- 2. Estimate of the amount of time saved by agencies if the software was available through a master contract.
- Estimate of the potential dollar savings if the software was available through a master contract.
- 4. Evaluation as to which master contracts for IT Software purchases should be pursued and which are not currently cost effective.

Services:

- 1. List of historic IT Services contracts signed with amount spent by the state versus the expected "retail" cost of the services.
- 2. Estimate of the amount of time saved by agencies by using the ITQ process.
- 3. Estimate of the potential dollar savings for proposed changes to the ITQ process.

- 4. Evaluation as to which ITQ changes should be pursued and which are not currently cost effective.
- **4.** How many state resources are currently involved on the initiative? (identify total numbers of FTE's and the percentage of time on behalf of the initiative)

Hardware:

uuvva	arc.	
1.	Agency collection of data: 40 hours/agency x 11 JCIO agencies =	440 hours
2.	Team evaluation of data: (16 hours of meetings + 16 hours research) x 8 people	e= 256 hours
3.	Production of Report: 2 people x 10 hours each =	20 hours
4.	JCIO review & rewrite of Report: 10 members x 4 meetings x 1 hr/meeting =	40 hours
5.	Total initiative budget: abo	out 756 hours

Software:

1.	Agency collection of data: 40 hours/agency x 11 JCIO agencies =	440 hours
2.	Team evaluation of data: (15 hours meetings + 25 hours research) x 6 people =	240 hours
3.	Production of Report: 2 people x 10 hours each =	20 hours
4.	JCIO review & rewrite of Report: 10 members x 4 meetings x 1 hr/meeting =	40 hours
5.	Total initiative budget: about	t 740 hours

Services:

vice	5.	
1.	Agency collection of data: 40 hours/agency x 5 JCIO agencies =	200 hours
2.	Team evaluation of data: (15 hours meetings + 25 hours research) x 5 peop	ole = 200 hours
3.	Production of Report: 2 people x 10 hours each =	20 hours
4.	JCIO review & rewrite of Report: 10 members x 4 meetings x 1 hr/meeting :	= 40 hours
5.	Total initiative budget:	about 460 hours

Initiative Name: A-4 IT Standards

1. What are the goals of the initiative?

- Create standards across the enterprise; beginning with process and security standards
- Identify utility services to move toward standardization
- Sort current products and services into centralized utilities
- Institute compliance for utility services
- Create a set of guidelines for IT security policy development; mandate each department to adopt an IT security policy by a certain date
- Complete IT security standards; develop hardware, virtualization and networking standards

2. How does this initiative impact the state's business goals?

Standards align agency IT process and purchasing with statewide business strategy to:

- Achieve economy of scale
- Achieve consistency in operations and training
- Achieve strategic goals
- Avoid unnecessary cost
- Balance strategy and demands, enterprise architecture, program portfolio and budgets
- Comply with Federal standards and guidelines
- Eliminate wasteful spending and wasteful activity
- Enhance Enterprise Resource Planning
- · Maximize purchasing and operational efficiency
- Meet constituent requirements
- Mitigate Risks
- Promote collaboration between agencies
- Simplify integration

3. What are the deliverables of the initiative?

The deliverables are world class products and services designed to support business endeavors that produce successful and repeatable results. The specific deliverables are:

- Enterprise IT standards
 - Security standards
 - Operational standards
- Master purchasing contracts
- Utility services
- Enterprise savings
- Efficient use of computer assets
- Secure integrated systems

4. How many state resources are currently involved on the initiative? (identify total numbers of FTE's and the percentage of time on behalf of the initiative)

Ongoing Work: DAS-ITE, Standards Revision or Creation (each standard).

Estimated Effort Required Per Standard

	FTEs	Role	Hours per Week	Estimated Time to Complete (Weeks)	Total Hours
	1	Coordinator	10	32	320
	10	Agency SME	1.5	24	360
	12	JCIO	0.5	4	24
	20	CIO Council	0.5	2	20
	6	SAG	0.25	12	18
	8	TGB	1	1	8
	2	Other (AG)	1	3	6
_	1	Director	0.1	1	0.1
Totals	60				756.1

Initiative Name: A-6 Help Desk Services

1. What are the goals of the initiative?

The goal of the Help Desk Services Project is to create a common help desk technology solution that state agencies can use to support the services they provide to their customers. This solution will include a software package, hardware, telecommunications, standards, service level agreements, and customer self-help tools.

2. How does this initiative impact the state's business goals?

State agencies must be prepared to deliver essential services to customers and employees. A common technology solution for help desk services that can be versatile enough to offer state agencies an information and assistance resource that supports the agency's core business plan and services will positively impact an agency's ability to fulfill its business goals.

A Help Desk Services System automates infrastructure management processes to control the quality and delivery of business critical services. Supported management processes can be managed against agreed service levels. A help desk application supplies tools for managing, reporting, and improving all incident management processes.

A common technology solution is intended to increase the quality and quantity of delivered services, decrease the time required to resolve incidents, prevent incidents from occurring or reoccurring, reduce the risk associated with an evolving infrastructure, and improve incident management processes involved in delivering high quality service levels.

3. What are the deliverables of the initiative?

A common help desk solution was deployed in three agencies (ICN, DOT, and DAS-ITE) to assist agencies in meeting needs for managing large volumes of help desk inquiries. DNR has joined these charter agencies. This solution is nearing its end of life. An initiative is underway to explore other vendor applications to replace the current service and develop a recommendation for a replacement solution.

The service must be ITIL based or compliant, use an Oracle or SQL Server database engine, and be a Windows Server and Client application. The solution must have all application modules that the current service has, a web portal for customer communications, and robust out-of-the-box report generation. SaaS/host pricing will be explored if applicable.

4. How many state resources are currently involved on the initiative? (identify total numbers of FTE's and the percentage of time on behalf of the project)

For the currently used solution:

Ongoing work:

Regular meetings and tasks: 7 people x 8 hours/mo. 56 hours/mo.

(Other support personnel as required held to minimum number of hours)

Implementation Work: (estimated hours based on DNR's implementation)

Five Charter Members (requirements, development, implementation, training): 98 hours

(Larger agencies may require more time)

Additional time to modify User Interface, Business Rules, other items:

40 hours

IT and business personnel at DNR:

Initial meetings 2 hours

Planning meetings: 10 meetings x 4 hours

Internal planning/coordination: 14 weeks x 16 hours per week 224 hours

Training for 25 people: 3 sessions x 4 hours each 12 hours

Total hours invested at DNR 278 hours

For the initiative to develop a recommendation for a replacement solution:

Time for developing a description of the requirements for a help desk solution

1. Define the overall project goal: 10 people x 8 hours per person 80 hours

2. *General project scope*: 8 people x 4 hours per person 32 hours

3. Selection of the project team: 10 people x 3 hours per person 30 hours

Time for developing an implementation plan for the service

1. Refining the project scope: 6 people x 6 hours per person 36 hours

2. Project time management processes: 6 people x 10 hours per person 60 hours

3. Develop project schedule: 4 people x 10 hours per person 40 hours

Time for establishing a budget for procurement for delivery of a service

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- 1. Review of existing or potential Application to deploy: 3 people x 8 hours per person 24 hours
- 2. Present all cost factors to Management Team: 3 people x 6 hours per person 18 hours

Time for developing recommendation

320 hours

For agencies to implement the recommendation for a replacement solution:

Time for obtaining a commitment from potential customers interested in using the service

- 1. Schedule Meeting(s) with prospective client agencies and
- 2. Use the Help Desk Planner calculation sheets to put together a pricing sheet and
- 3. *Develop testimonials by other client agencies:* 3 people x 5 hours per person 15 hours

Time for developing a cost for the service

- 1. List and calculate costs of all actions: 3 people x 8 hours per person 24 hours
- 2. Review with client agency point(s) of contact: 2 people x 5 hours per person 10 hours

Time for getting final signup and cost sharing agreements

- 1. Present and discuss the MOU 'Memorandum of Understanding' and the SLA 'Service LevelAgreement': 2 people x 8 hours per person16 hours
- 2. Present Total Financial Cost to client agency: 2 people x 4 hours per person 8 hours

Time for procuring and implementing the service

- 1. Create a Master List for all data sources with the prospective client agency and
- 2. Transform all data and information into loadable information and
- 3. Final review of data: 3 people x 20 hours per person 60 hours
- 4. Load all new client data: 2 people x 20 hours per person 40 hours
- 5. *Train the new user agency personnel:* 2 people x 20 hours per person 40 hours
- 6. "Go Live Day," for the new agency: 2 people x 16 hours per person 32 hours

Time for implementing recommendation

230 hours

(Dependent on agency size, number of modules implemented, amount of dedicated time)

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Initiative Name: A-7 Service-Oriented Architecture

1. What are the goals of the initiative?

- Provide a standards-based, centrally-managed point of entry for all data exchanges offered by and between participating State agencies.
- Foster the development of standards for the design, implementation and management of data exchanged by and between participating State agencies.
- Develop and implement a set of run-time governance processes to ensure operational stability of the shared infrastructure.
- Enhance the security and level of service for all data exchanges that use the infrastructure.

2. How does this initiative impact the state's business goals?

- Reduce or eliminate the proliferation of disconnected or incompatible SOA infrastructure within the State of Iowa.
- Reduce the overhead costs associated with offering high-volume or highly-available data services by or between State agencies.
- Improve the quality, timeliness and availability of important data for State agencies.

3. What are the deliverables of the initiative?

- The working SOA Infrastructure as currently implemented (using IBM DataPower).
- Associated artifacts, including processes, Service-Level Agreements (SLAs) and service requests.
- A utility service for ongoing funding of the initiative, and financial management of the utility.
- Processes and forums for the community of SOA Infrastructure customers and users to provide and receive information about the goals, direction and plans for ongoing SOA initiatives.
- A governance organization that manages the goals, priorities and performance of the overall SOA initiative.
- **4.** How many state resources are currently involved on the initiative? (identify total numbers of FTE's and the percentage of time on behalf of the initiative)
 - Project Management (1 FTE @ 5%)
 = 100 hours
 - Technical Staff (5 FTE @ 5% each) = 500 hours
 - Governance Team (10 FTE @ 2% each) = 420 hours

Initiative Name: A-8 Shared Authentication (ENTAA)

What are the goals of the initiative?

- Establish a common repository for the management of State employee, contract and citizen user accounts.
- Make this repository available for use in securing web applications offered by State, county and local government entities in Iowa.
- Sponsor discussion, development and implementation of new policies for managing user identity information within the State of Iowa.

How does this initiative impact the state's business goals?

- Reduces the lead time, risk and cost of delivering new information and capabilities to lowans via the Internet.
- Allows State agencies and other governmental entities to avoid the costs of managing user accounts and responding to end-user inquiries about those accounts.
- Provides a single set of credentials for users.
- Enhances overall electronic security for the State.
- Reduces the barriers to citizens' use of electronic government initiatives.

What are the deliverables of the initiative?

- The working Enterprise A&A (ENTAA) web application for account creation, management and authentication.
- Associated artifacts, including use cases, system requirements, designs, change requests and release notes.
- A utility service for ongoing funding of the initiative, and financial management of the utility.
- Processes and forums for the community of ENTAA customers and users to provide and receive information about the goals, direction and plans for ongoing ENTAA operations.

• How many state resources are currently involved on the initiative? (identify total numbers of FTE's and the percentage of time on behalf of the initiative)

- Project Management (1 FTE @ 5%)
- Technical Staff (2 FTE @ 15%)

Initiative Name: A-9 Credit Card / Payment Engine

1. What are the goals of the initiative?

PCI-compliant processing of web-based credit card payments by a third party.

Front-end card reader that either encrypts cardholder data prior to entering merchant's POS system (tokenization) or limits cardholder data flowing through merchant's system.

2. How does this initiative impact the state's business goals?

During the month of March, 2009 the state processed 29,475 credit card transactions and processes approximately 300,000 credit card transactions annually.

Allow state agencies to accept credit card payments over the internet, the state's Information Technology Enterprise developed its "E-Payment Engine". The E-Payment Engine is the first stop for all Internet credit and debit transactions in the payment stream. It formats and encrypts transactions, forwards transactions to an internet gateway processor and provides reporting to state agencies. No cardholder information is stored by the E-Payment Engine at any point.

To reduce its exposure to PCI-DSS, the state would like to modify the E-Payment process to include a vendor application that would become the first stop for all internet credit and debit card information. The state anticipates that this would be accomplished by transferring the end user to the vendor's application where the end user would provide payment information, such as credit card number, etc.

The vendor will be responsible for forwarding the card information to the merchant acquirer, accepting transaction completion information from the acquirer and returning status and contextual information, as specified later in this document, to initiating application and the state's E-Payment Engine. The state is willing to consider alternative methods to achieve the same goal.

3. What are the deliverables of the initiative?

Software API's that would allow State agencies the ability to integrate a vendor provided PCI compliant credit card authentication solution within existing State owned web sites and provision of credit card reading hardware that encrypts the data so that over-the-counter transactions at State agency locations are supported PCI compliant manner that can integrate with existing software applications that manage the receipt of funds from customers.

Convenient options for access provided to employees, agencies, businesses and the public with to a payment screen via a web browser from a variety of devices with information to the owning agencies is to be available 7 days per week, 24 hours per day. The system should allow authorized users to obtain and update information through self service applications that require little or no training.

4. How many state resources are currently involved on the initiative? (identify total numbers of FTE's and the percentage of time on behalf of the initiative)

Initiative Name: B-1 Portfolio Management (Application Portfolio Inventory)

1. What is the goal of the initiative?

Ongoing work: The Application Portfolio Inventory (API) data will be maintained by individual agencies on an as needed basis (at least once a year). They will provide the enterprise with the information necessary for recovery of applications. The goal is to recover the IT applications as quickly as possible to support the essential functions of state government.

2. How does this initiative impact the state's business goals?

Currently the API contains nearly 900 application records. There are a great many interdependencies between applications and the business process that support the essential services provided by state government. This initiative will enable us capture and report on these interdependencies so that we can better assess impacts from outages, mitigate risks, and prioritize recovery.

Ongoing work and planned project: The repository of API (Application Portfolio Inventory) agency data for critical agency applications will be on-going. New applications and current applications will be added, deleted and changed as needed.

3. What are the deliverables of the initiative?

Ongoing work:

- API lead team will review the API activity via quarterly reports
- 34 agencies maintaining IT applications in API/LDRPS
- Initial training and access for new API users
- LDRPS administrator will resolve API system issues
- API reports

Planned project: none

4. How many state resources are currently involved on the initiative?

Ongoing work: (annual)300 hoursOne API/LDRPS administrator300 hoursAPI steering committee-annual review (7 members x 2 hours)14 hoursPortfolio maintenance (34 API users @4 hours)136 hoursTraining @ 3 sessions for 2 hours each10 hours• Produce training materials10 hours• API users-- 34 IT staff @ 1 session for 2 hours68 hoursTotal528 hours

Initiative Name: B-2 Desktop and Server Virtualization

1. What are the goals of the initiative?

To provide a proof of concept that desktop and server virtualization will save resources for agencies.

To evaluate staff effort required to set up and maintain virtual desktop environment, assess real storage and other resource requirements, evaluate disaster recovery potential.

To develop supporting financial analysis and determine viability of a business model to support the initiative.

2. How does this initiative impact the state's business goals?

The benefits of desktop virtualization include energy savings, reduced hardware costs, improved security, improved disaster recovery, reduced IT operations costs, and many others.

3. What are the deliverables of the initiative?

Implementation of virtual desktops for testing by server and desktop support staff.

Evaluation of storage requirements for different user profiles, evaluation of demo thin client hardware, cost analysis of one-time and ongoing costs.

4. How many state resources are currently involved on the initiative? (identify total numbers of FTE's and the percentage of time on behalf of the initiative)

Initiative Name: B-3 GIS Services

1. What are the goals of the initiative?

Provide the tools and education needed to maximize state agencies' benefits from geospatial data and expertise within lowa government.

Continue to invest in Iowa's Geospatial Infrastructure as an enterprise resource. To date, investments have been made to develop Iowa's Geospatial Infrastructure (IGI) that include LiDAR elevation data (\$4.3 mill), multiple years of orthophotography (\$3.0mill+), DOT's Linear Referencing System (\$??mill), National Wetland Inventory (\$1.4 mill), etc. etc. Projects that are currently ongoing include a new high-accuracy address point layer (\$1.5mill), high-resolution landcover layer (\$350,000), and digital statewide flood plain maps (\$20mill+).

Provide two GIS FTE's for two years to work with any and all willing agencies to overcome obstacles related to GIS integration and adoption. One FTE will focus on education and coordination within individual agencies while the other will focus on consolidating, simplifying, and standardizing data to facilitate its use across agency borders as well developing web-based GIS services to simplify the consumption of geospatial data by all interested parties. As acknowledged above, GIS projects have recently been funded from Pooled Technology; however few state agencies are realizing value from these investments yet. A cause for this inactivity may include a lack of awareness of what is available and how to use it, and a lack of GIS savvy staff in most agencies. Funding these two GIS FTE's will address these needs.

Ability to provide a central repository that state government can consume geospatial data (vector, raster, address) in a common way. State government agencies will be able to provide data and the repository can consume data from other agencies web services.

A statewide point and range address layer should be developed to help agencies geocode addresses. A state address point and range service does not provide ROI to state government, If data was maintained and partnerships developed with local entities, this service could have a ROI across all levels of government.

A state address layer can also be integrated with Iowa DOTs Linear Referencing System (LRS). This integration will allow users to pass an address to LRS and return a coordinate, reference post, literal description or mile point. This would be beneficial for Public safety and others. For example, as a 911 call comes in from a cell phone the dispatcher can have an address, literal description and reference post of the incident from Iowa DOT LRS.

2. How does this initiative impact the state's business goals?

Enhance the state's ability to provide services to lowans by improving our decision support systems with geospatial data that crosses organizational boundaries. If we just look at the address point layer currently under development we can identify incredible impacts. Accurate addresses are critical to emergency responders. However, when coordinated, we will be able to tie environmental risks, human service issues, critical infrastructure locations, economic development opportunities and countless others to the same address points. What benefits could be achieved by tying DNR's environmental data to DPH's health data? How much more effective will we be at dealing with

disasters like the 2008 floods if we know what and where critical infrastructure is located in terms of the projected flood inundation areas?

Relating to transportation features like, road centerlines, airports, etc., road centerlines are the most common data layer in geospatial systems. Iowa DOT already maintains a state road centerline of all public roads with assistance from its local partners.

lowa DOT has invested heavily in a linear referencing system based on the NCHRP 20(27) model. This model allows locations on a road network to be transformed into other location type. For example a coordinate can be converted to a literal description or a literal description can be converted to an address.

3. What are the deliverables of the initiative?

Education, outreach and coordination as described in #1 above.

Central geospatial repository for State of Iowa government to consume shared department data using web map services (WMS), web feature services (WFS), web coverage services (WCS) and other services like KML, REST, JSON.

Ability to geocode data using address ranges and/or point data through a state address service.

Integration of address points/ranges to Iowa DOT's LRS and a system to allow other state agencies to transform data along a road network.

4. How many state resources are currently involved on the initiative? (identify total numbers of FTE's and the percentage of time on behalf of the initiative)

Identify funding for 2 FTE's that will be devoted to delivering the goals outlined above. Additionally, the DOT, DNR, HSEMD, DPH and a few other agencies have full-time GIS staff that range in number from one to a dozen. Because it is widely understood amongst these existing staff that the benefits to be gained through collaboration is tremendous, these individuals and their agencies have agreed to contribute time and energy to see this initiative succeed.

lowa DOT has about 6 FTEs dedicated to lowa DOT GIS related activities. As for the initiative only about .1 FTEs are working on a state government central repository and address project. But lowa DOT is building geospatial systems using services so data can be consumed easily by a central state repository.

lowa DOT has 7 FTEs to maintain road centerlines and LRS.